Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
LightSquared Inc.'s	)	IB Docket No. 11-109
Petition for Declaratory Ruling	)	ET Docket No. 10-142
	)	

AMERICAN CONGRESS ON SURVEYING AND MAPPING'S AND NATIONAL SOCIETY OF PROFESSIONAL SURVEYOR'S REPLY COMMENTS TO LIGHTSQUARED'S PETITION FOR DECLARATORY RULING

The American Congress on Surveying and Mapping (ACSM) and the National Society of Professional Surveyors (NSPS) hereby submits these comments in REPLY to the comments by LightSquared, Inc. in response to their Petition for Declaratory Ruling regarding the regulatory status of commercial Global Positioning System (GPS) receivers. The FCC should DENY LightSquared's Petition for Declaratory Ruling because: (1) manufacturers and users of commercial GPS receivers have standing to seek protection from incompatible operations in adjacent MSS bands, (2) commercial GPS devices do not represent a "nonconforming" use, and (3) LightSquared proposes a non-conforming use, therefore it must bear all costs and burdens of ensuring that its service is compatible with existing primary service spectrum users.

Manufacturers and Users of Commercial GPS Receivers Have Standing to Seek Protection From Incompatible Operations in Adjacent MSS Bands.

Standing is the ability of a party to bring an action based upon their stake in the outcome. A party seeking to demonstrate standing must be able to show a sufficient connection to and harm from the action challenged.

There are three constitutional requirements to prove standing:

1. Injury: The party showing standing must have suffered or imminently will suffer injury. The injury must not be abstract and must be within the zone of interests meant to be regulated or protected under the statutory or constitutional guarantee in question. Here, the users of commercial GPS receivers --- including, but not limited to, surveying and mapping professionals and the thousands of citizens who depend on the accuracy of the data procured by surveying and mapping professionals --- would be injured if the commercial GPS receivers they use are rendered inoperable by LightSquared's proposed action.
2. Causation: The injury must be reasonably connected to the opposing party's conduct. Here, LightSquared is claiming that commercial GPS receiver manufacturers and users lack standing to file complaints or other pleadings in this matter. However, it is LightSquared's very action, or proposed action, that will cause injury to commercial GPS receiver manufacturers and users, including, but not limited to surveying and mapping professionals.
3. Redressability: A favorable decision by the governing body (in this case, the FCC) must be likely to redress the injury. Here, a favorable decision by the FCC which would protect commercial GPS receiver users from interference by LightSquared, would redress the injury.

It is not necessary for individual GPS receivers to be licensed in order to be protected from harmful interference. GPS receivers are an essential element in the successful operation of radio navigation satellite service (RNSS), a primary service allocated to and operating in the United States in the 1559 – 1610 MHz portion of the L-band. But more importantly, it is not the commercial GPS receivers that require

protection from harmful interference; it is the individual users of those devices that require and deserve protection. It is the individual users of commercial GPS receivers that have standing to seek protection from incompatible operations in adjacent MSS bands.

Commercial GPS Devices Do Not Represent a "NonConforming" Use.

LightSquared claims that "commercial GPS devices that receive GPS signals in the MSS band are nonconforming and inconsistent with the MSS allocation in that band, and as such are not entitled to any protection. This assertion is an outright falsehood. Part of LightSquared's claim on this issue is that "many GPS receivers employ inadequate filtering and frequency discrimination." In fact, commercial GPS devices have long been designed to take advantage of the latest technology. Manufacturers have always had the ability to design GPS receivers as they see fit to support their applications and maximize the benefits they convey in a manner that keeps pace with technological and market developments. For decades, commercial GPS receivers have been designed to pick up very faint signals transmitted at very low power throughout, but not outside, the GPS band by satellites thousands of miles away. This is because the wider the bandwidth a GPS receiver is designed to receive, the greater the potential for the receiver to pick up the intended GPS signal and deliver more accurate positioning information to users.

LightSquared has argued that GPS receivers do not employ proper filtering techniques "largely because they fail to meet standards set forth in relevant U.S. specifications for civilian GPS use." But this argument fails because the Department of Defense has never specified GPS receiver standards or attempted to do so. The National Telecommunications and Information Administration (NTIA) also recently recognized

"there are currently no federal, FCC or industry developed GPS receiver standards except for those international standards … for certified aviation devices."

If there are no controlling standards for commercial GPS receivers, then there is no evidence to prove that such commercial GPS devices are "nonconforming and inconsistent with the MSS allocation in that band" as LightSquared claims.

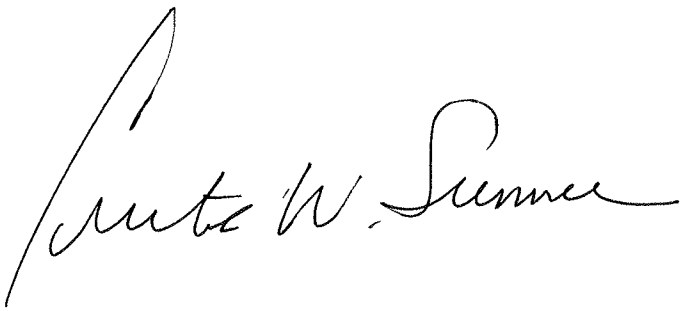
LightSquared Proposes a Non-Conforming Use, Therefore It Must Bear All Costs and Burdens of Ensuring That Its Service Is Compatible With Existing Primary Service Spectrum Users.

LightSquared, while authorized to provide primary MSS, seeks to fundamentally alter its spectrum use by introducing a widely deployed, high power terrestrial mobile service in the MSS band. Although LightSquared has obtained a waiver that could permit such operations, its ability to provide such services has been conditioned on demonstrating that it will not interfere with GPS. It has failed it meet that condition and it is now using a Petition for Declaratory Ruling to evade its obligations to not interfere with GPS. This proposed non-conforming use --- which NTIA has said will cause interference with virtually all commercial GPS devices, places on LightSquared the burden of ensuring that its service is compatible with existing primary service spectrum users as well as all costs so associated. Additionally, LightSquared would be obligated to take responsibility for addressing harmful interference, as the FCC typically follows a "first in time is first in rights" approach with respect to the introduction of new service that impacts previously allocated spectrum use.

For the foregoing reasons, the American Congress on Surveying and Mapping and the National Society of Professional Surveyors respectfully urges the FCC to dismiss

LightSquared's Petition for Declaratory ruling as substantively and procedurally defective.

Respectfully submitted,



Curtis Sumner, Executive Director March 12, 2012